Progress Energy

May 2, 2007

Mr. Charles Terreni
Chief Clerk/Administrator
Public Service Commission of South Carolina
P. O. Drawer 11649
Columbia, South Carolina 29211

Re: Docket No. 2007-1-E

Dear Mr. Terreni:

Enclosed for filing is the original plus one copy of the direct testimony of Carolina Power & Light Company, d/b/a Progress Energy Carolinas, Inc. witnesses Bruce P. Barkley and Dewey S. Roberts, II. In accordance with Commission directive in Docket No. 2005-83-A, also enclosed is a Notice of Filing. All parties of record have been served.

Very truly yours,

s/

Len S. Anthony
Deputy General Counsel – Regulatory Affairs

LSA:mhm

Enclosures

cc: All parties of record

249065

Progress Energy Service Company, LLC
P.O. Box 1551
Raleigh, NC 27602

PUBLIC SERVICE COMMISSION OF SOUTH CAROLINA

DOCKETING DEPARTMENT

NOTICE OF FILING

DOCKET NO. 2007-1-E

CAROLINA POWER & LIGHT COMPANY d/b/a PROGRESS ENERGY CAROLINAS, INC. - ANNUAL REVIEW OF BASE RATES FOR FUEL COSTS.

S.C. Code Ann. Section 58-27-865 (Supp. 2004) established a procedure for annual hearings to allow the Commission and all interested parties to review the fuel purchasing practices and policies of the Company and for the Commission to determine if any adjustment in the fuel cost recovery mechanism is necessary and reasonable.

On May 2, 2007 Carolina Power & Light Company d/b/a Progress Energy Carolinas, Inc. ("the Company") submitted testimony in support of a change in rates based solely on the cost of fuel during the period April 1, 2006 through March 31, 2007.

The Company has requested that the Commission adjust the base fuel factor established in Docket No. 2006-1-E by an increment of 0.175 cents per kWh. The current base fuel factor is 2.5 cents per kWh, and the increment is the difference between the current factor and the requested factor of 2.675 cents per kWh.

Public Service Commission of SC
Attention: Docketing Department
PO Drawer 11649
Columbia, SC 29211

Date: ___________________

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PUBLIC SERVICE COMMISSION OF SOUTH CAROLINA
DOCKET NO. 2007-1-E
DIRECT TESTIMONY OF PROGRESS ENERGY CAROLINAS, INC.

WITNESS BRUCE P. BARKLEY

Q. Please state your name, address, and position.

A. My name is Bruce P. Barkley and my business address is 410 S. Wilmington Street, Raleigh, North Carolina. My position is Manager–Fuel Forecasting and Regulatory Support for Progress Energy Carolinas, Inc. ("PEC" or "Company")

Q. Please describe your educational background and professional experience.

A. I obtained a Bachelor of Science Degree in Business Administration with a concentration in Accounting from the University of North Carolina at Chapel Hill in 1984 and an MBA Degree from Wake Forest University in 1999. I obtained my CPA license in 1987. Prior to joining Progress Energy, I held various positions with Public Service Company of North Carolina, Inc., where I was responsible for regulatory filings and reports submitted to the North Carolina Utilities Commission. ("NCUC") I joined Progress Energy in the Regulatory Services Section in 2001 and transferred to my current position in the Regulated Fuels Department in 2005. I am responsible for fuel forecasting, reporting and associated regulatory matters.

Q. Have you previously presented testimony regarding fuel clauses?

A. Yes, I appeared before the South Carolina Public Service Commission ("SCPSC") from 2003-2006 and in numerous fuel cases before the NCUC.

Q. What is the purpose of your testimony?

A. The purpose of my testimony is to review PEC's fuel cost for the historical period under review in this proceeding, April 2006 through March 2007, support the reasonableness of these costs, present projected fuel cost for the period April 2007 through June 2008 and recommend a fuel factor to be effective July 1, 2007. I will provide seven exhibits to support my testimony.

Q. Please summarize PEC's fuel cost and inventory levels for the review period.

A. Barkley Exhibit No. 1 summarizes PEC's fossil fuel costs for the review period, including quantities purchased and consumed and the beginning and ending inventory levels. The price of delivered coal increased by $3.79 per ton (5.6%) as compared to the prior review period, up to $71.35/ton, due primarily to the expiration of contracts and replacement with contracts priced at current market values as well as a slight increase in the cost of rail transportation. The significant upward movement in the cost of coal since 2002 is illustrated at Barkley Exhibit No. 2. The inventory levels maintained by PEC for both coal and oil ensured that an adequate supply of these fuels was available to meet customer needs during the review period at a reasonable cost. The price of natural gas declined during the current review period by $1.76/mmbtu, (15.3%) due primarily to the lack of hurricane activity experienced during this review period as compared to prior years. Recent history indicating the large volatility in the price of natural gas is shown at Barkley Exhibit No. 3.

Q. Please describe the Company's coal procurement practices.

A. The Company continues to follow the same procurement practices that it has historically followed, and a summary of those practices is as follows:

1. **<u>Estimate Fuel Requirements.</u>** Fuel requirements are estimated annually using a long-term forecasting simulation model and monthly using a short-

term simulation model. Both simulation models factor in load forecasts, system planning and capacity factors for all generating plants.

2. **Establish Inventory Requirements**. PEC uses a systematic inventory modeling process developed by North Carolina State University to evaluate probabilities and quantify potential risks that could potentially impact inventory levels. The outcome of the model is optimal inventory levels for each plant given potential risks such as losing a coal handling system or a strike by the railroad.

3. **Monitor Ongoing Fuel Requirements**. On a monthly basis, there is a review and evaluation of current inventory levels, supplier performance with respect to shipments and forecasted short-term requirements and commitments to determine additional fuel requirements.

4. **Develop Qualified Supplier List**. A list of qualified suppliers is maintained throughout the year and, to the extent possible, capabilities of suppliers are evaluated including current performance, reserves, coal quality, railroad origination, condition of supplier and loading capabilities.

5. **Bid Requests**. At least once a year, a formal solicitation is sent out to all qualified suppliers for spot and/or longer term coal. PEC seeks staggered expiration terms to reduce the impact of market volatility on customer rates.

6. **Bid Evaluation**. Contracts are awarded after a thorough evaluation process including an economic evaluation, financial and credit review of the supplier, performance evaluation, coal quality conformance with plant

requirements, supplier quality controls, test burns (if necessary) and compliance with federal environmental regulations.

7. **Spot Purchases**. To supplement our fuel supply, short-term spot offers are solicited as needed and purchases made in accordance to needs. These purchases may be limited to a single train.

8. **Monitoring of Purchases**. Purchases are administered, monitored and expedited as needed to ensure compliance with contractual terms.

9. **Quality Control.** The Company requires suppliers to sample, analyze and weigh all coal shipped under the agreements using independent third party labs (ASTM Standards) and certified scales. Three to four samples are typical with one sample being a referee sample should a dispute arise. Sample analyses are used for contractual quality pricing adjustments. Weighing is done at the mine using certified scales and, if no scales are certified at the mine, certified railroad scales are used.

Q. What types of coal does PEC burn in its plants?

A. PEC's coal-fired units were designed to burn high BTU bituminous coal. Environmental requirements dictate that either the coal is relatively low in sulfur or that sulfur emissions are reduced by pollution control devices. With the exception of Roxboro Unit 4 and Mayo Unit 1, all NC coal-fired plants must emit a sulfur dioxide (SO_2) content no greater than 2.3 lbs. SO_2/mmbtu. Roxboro Unit 4 and Mayo Unit 1 must emit a level no greater than 1.2 lbs. SO_2/mmbtu. The coal to satisfy this requirement, known as compliance coal, has historically comprised about one-third of PEC's annual requirement, or about 4 million tons.

Q. Does the sulfur limitation influence the cost of the coal?

A. Yes, from at least two perspectives. First, under current environmental regulations, the operator of a coal fired unit must hold an SO2 emission allowance for every ton of SO2 emitted during the operation of that unit. SO2 emission allowances have a market value and thus influence the cost of coal. The lower sulfur coals will emit less SO2 and will therefore require less emission allowances. Thus, the lower sulfur coals are more expensive. PEC has seen a significant difference, approximating $5 dollars per ton during the review period, between the market prices for compliance and non-compliance coal.

Secondly, the SO2 limits currently preclude the use of most Northern Appalachia coals or coals from the Illinois Basin at most of PEC's coal-fired generating units. These coals may be less expensive than Central Appalachia ("CAPP") coals, but typically have sulfur contents greater than PEC is allowed to emit. In addition, given that these coals are located farther from PEC's plants, they have increased transportation costs. Therefore, the majority of PEC's current domestic sources are low to mid-range sulfur coals predominately located in the CAPP region which includes West Virginia, Virginia and Kentucky.

Q. Please provide an update on PEC's ability to burn higher sulfur coals.

A. PEC has installed SO2 removal devices known as scrubbers at its two generating units located near Asheville, NC and is currently purchasing coal with a higher percentage of sulfur for these units. PEC anticipates that it will also have operational scrubbers at its Roxboro, NC coal-fired units during 2008. PEC currently forecasts that approximately 1.3 million tons of coal with a sulfur content greater than 2.3 lbs. SO_2/mmbtu will be purchased during the year ending June 30, 2008.

Q. How does PEC determine the appropriate sulfur content of its coal purchases?

A. PEC uses a wide variety of procurement options through its supplier bidding process. Evaluations of PEC's long-term and short-term coal needs are made from the standpoint of obtaining a reliable supply of coal at the lowest total cost. Items considered include coal price, coal quality, transportation cost, operating costs such as the limestone and ammonia needed to operate pollution control devices, maintenance costs, emission allowance costs and any associated capital costs.

Q. What are PEC's expectations for the forecasted period?

A. The recent decline in coal prices indicated on Barkley Exhibit No 2 is primarily due to moderate weather and increasing inventories. PEC believes that the market forces that caused the longer term increase in coal prices indicated on Exhibit No. 2 are likely to persist and that price volatility will also persist. These market forces include production costs for coal mining, strong demand for coal both domestically and internationally, environmental requirements and the fact that coal remains much less expensive than natural gas on a price per btu basis. PEC projects that its delivered cost of coal for the forecasted period will be \$70.82 per ton, as compared to \$71.35 per ton for the test period.

Q. How is coal transported to PEC?

A. Coal is generally transported to individual plants by rail using either the CSX railway or the Norfolk & Southern (NS) railway. PEC receives a limited amount of coal by truck at Asheville and has received foreign coal by barge at the Sutton Plant located near Wilmington, NC since 2003. The Roxboro and Mayo plants, PEC's largest coal plants, and the Asheville plant are served solely by NS. The Robinson, Weatherspoon, and Sutton Plants are served solely by CSX. The Lee and Cape Fear Plants are served by both CSX and NS. To minimize transportation costs, PEC attempts to negotiate the most advantageous rates possible. PEC, through a consortium of shippers, actively participates in proceedings before the Federal Surface Transportation Board in an attempt to lower its rail costs. As noted above, PEC is now using water and truck transportation when possible to transport coal in order to lower its transportation costs and to demonstrate to the railroads that PEC will utilize other transportation opportunities.

Q. Please describe your procurement practices for natural gas.

A. PEC follows a process that is very similar to that discussed earlier for coal. Production costing models are used to project future demands. Based on the projections, solicitations are made, bids received, and contracts are established to cover a minimum of 75% of our projected needs for the coming year and 60% of firm needs for a period of up to five years. Long term contracts are established and maintained for gas transportation. Commodity contracts are currently established on terms of up to five years. Typically, commodity contracts are established on the basis of recognized industry price indices with appropriate adders. On a short term basis, additional purchases on the spot market are made as needed.

Q. What are PEC's expectations for the forecasted period?

A. The previous review period was marked by extremely high prices, up to \$20/mmbtu, in the wake of Hurricanes Katrina and Rita which occurred during

August and September of 2005. While the less active hurricane season of 2006 contributed to lower natural gas prices, PEC expects continued volatility in the gas markets. PEC's forecasted delivered cost, excluding fixed costs, for the year ending June 30, 2008 is $9.23/mmbtu. Natural gas prices remain high from a historical perspective in light of the demand for natural gas, oil prices and the uncertain nature of price relief associated with imported liquefied natural gas or other forms of additional supply.

Q. Please discuss the methodology that you use to prepare forecasts of future coal and gas prices.

A. The primary coal price forecast is developed based upon a third party forecast prepared by Global Energy Decisions, Inc. ("Global"). Global is an energy services company that specializes in energy related forecasting and modeling support. The Global forecast is developed using econometric principles and evaluation of market specific supply and demand factors. PEC believes that Global's forecasts reasonably represent coal market trends.

The current forecast for natural gas prices is based on the NYMEX Forward Price Curve. In recognition of the volatility in the natural gas market that has existed for many years and the fact that price relief attributable to additional natural gas supply is not imminent, the forecast is adjusted to reflect PEC's commercial view on forward gas prices. The balance between supply and demand in the natural gas market is very tight. Supply or pipeline disruptions caused by storms or extreme temperatures can lead to rapid and significant increases in spot prices. Other costs, such as interstate pipeline charges and local distribution company charges are applied to arrive at a specific price for each generating plant.

Q Please discuss any hedging practices that PEC employs for coal or natural gas.

A. The most significant hedging practice that PEC employs is the fuel diversity of its generation resources as discussed by PEC Witness Roberts. PEC has traditionally hedged its coal costs by entering into long term contracts at fixed prices for a significant portion of its projected coal needs. Any additional coal would be purchased on the spot market as needed to maintain inventories. PEC strives to stagger contract expiration dates so that a portion of the contracts expire each year and is replaced with new contracts of similar duration. PEC currently expects to procure a minimum of 85% of its projected needs for the current year under contract. The annual amount under contract decreases to 60% or more for year 2 with minimums of 40%, 20% and 5% for years 3-5. Contracts beyond five years may be pursued if appropriate terms and conditions can be established. PEC believes that this structure of tiered contracts provides a reasonable degree of cost stability and allows the Company to respond appropriately to market trends, either upward or downward.

In response to increased usage, PEC began hedging its natural gas requirements in 2005 by executing fixed price contracts. PEC has also begun utilizing financial fixed price contracts to reduce price volatility and provide improved rate stability for customers.

Q. Please explain physical and financial hedging.

A. Physical hedging involves an agreement to purchase a commodity such as natural gas from a supplier at a fixed price and location. In contrast, financial hedges are not linked with the physical delivery of natural gas and are generally conducted with financial institutions. For example, PEC agrees to pay a market-index rate to a supplier for future natural gas deliveries and, in order to protect against rising prices, also enters into a transaction with a financial institution that effectively establishes the price to be paid for the natural gas. These types of transactions are not subject to weather-related force majeure. This market has a large number of participants and a great degree of liquidity. PEC plans to utilize both physical and financial hedges for a portion of its forecasted natural gas needs in order to reduce price volatility and provide improved rate stability for customers.

Q. Please describe PEC's treatment of costs associated with these products.

A. PEC charges or credits prudently-incurred natural gas costs and gains and losses associated with financial and physical hedging transactions to FERC Account Number 547 and treats them as recoverable fuel costs. Examples of such items may include premiums on options contracts, net settlements of swap transactions and any related transaction costs. These costs are an essential part of PEC's cost of fuel and purchasing strategy. Therefore, prudently-incurred hedging costs and the associated commodity cost should be fully recovered as a fuel cost.

Q. Does PEC purchase power?

A. Yes. As explained by PEC witness Roberts, PEC continually evaluates purchasing power if it can be reliably procured and delivered at a price that is less than the cost of PEC's generation. In accordance with 58-27-865(A) of the Code of Laws of South Carolina, PEC includes the lower of the purchase price or PEC's avoided variable cost for generating an equivalent amount of power for its economy purchases. Additionally, PEC purchases power from certain vendors that is treated as firm generation capacity purchases. In accordance with the statute, all of these costs are recorded as recoverable fuel costs with the exception of capacity-related charges.

Q. Please explain Barkley Exhibit No. 4

A. Barkley Exhibit No. 4 is a summary of PEC's actual system fuel cost and kilowatt-hour sales experienced during the period April 2006 through March 2007. Total system fuel costs were $1,218,090,792 and the total sales were 53,467,139,829 kilowatthours (kWh) for an annual average of 2.278 cents per kWh.

Q. How did the fuel revenue billings compare to the actual fuel costs incurred during the historical period April 2006 through March 2007?

A. Barkley Exhibit No. 5 is a monthly comparison of fuel revenues billed to South Carolina retail customers to the actual fuel costs attributable to those sales. During the year ended March 31, 2007, PEC's under-recovery of fuel costs decreased from $32.4 million to $22.9 million.

Q. Please explain Barkley Exhibit No. 6.

A. Barkley Exhibit No. 6 presents a fuel rate of 2.675 ¢/kWh for the 12-month period July 2007 through June 2008, consisting of a component for recovery of projected fuel expense for this period of 2.368¢/kWh and a component to collect the projected under-recovery at June 30, 2007 of .307¢/kWh. The projected under-recovery at June 30, 2007 is $21.1 million. Pursuant to the settlement approved by the SCPSC in Docket No. 2005-1-E, PEC anticipates full recovery of its prudently-incurred deferred fuel costs by June 30, 2008.

The fuel forecast supporting the 2.368¢/kWh for the year ending June 30, 2008 was generated by an hourly dispatch computer model that considers the latest forecasted fuel prices, outages at the generating plants based on planned maintenance and refueling schedules, forced outages based on historical trends, generating unit performance parameters and expected market conditions associated with power purchase and off-system sales opportunities.

Q. Please explain Barkley Exhibit No. 7.

A. Barkley Exhibit No. 7 provides projected costs and revenues, by month, for the period April 2007 through June 2008. The exhibit continues the use of the current base fuel component of 2.50¢/kWh through June 2007 and shows a fuel factor of 2.675 ¢/kWh for the period July 2007 through June 2008.

Q. Please provide a status update of environmental cost collection and explain how these costs have been treated in this filing.

A. On April 26, 2007, the South Carolina General Assembly ratified S. 431. This bill allows PEC and other utilities subject to the jurisdiction of the SCPSC to collect various environmental costs in fuel cost proceedings. These costs include ammonia, lime, limestone, urea, dibasic acid, catalysts and emission allowances. However, because the bill has not yet become effective, PEC has not included the collection of environmental costs in this filing. If the bill is enacted into law, PEC will immediately begin to track under-collections of these environmental costs by customer class on a monthly basis. Such under-collections, along with relevant forecasted costs, will be included in PEC's 2008 fuel filing. Consistent with the requirements of the legislation, PEC will allocate these costs among the following customer classes; Residential, Small General Service, Medium General Service, Large General Service and Lighting. The collection will be based upon the firm peak demand from the prior calendar year for the respective classes.

Q. Were PEC's fuel costs prudently incurred during the review period?

A. Yes. PEC's fuel costs were prudently incurred and accurately recorded and are fully recoverable pursuant to the Code of Laws of South Carolina. PEC continuously evaluates the term and spot markets for fuel and purchased power in order to determine the appropriate portfolio of long term and spot purchases that ensures a reliable supply of electricity for our customers at the lowest reasonable prices. Such evaluations include daily, weekly and monthly solicitations and subscriptions to fuel pricing services and trade publications. PEC makes fuel purchases at the best prices possible giving due regard to reliability of supply needs and environmental compliance. As discussed by PEC witness Roberts, PEC prudently operated its generation resources during the period under review in order to minimize its fuel costs and purchased power when doing so was cost effective.

Q. Does that complete your testimony?

A. Yes.

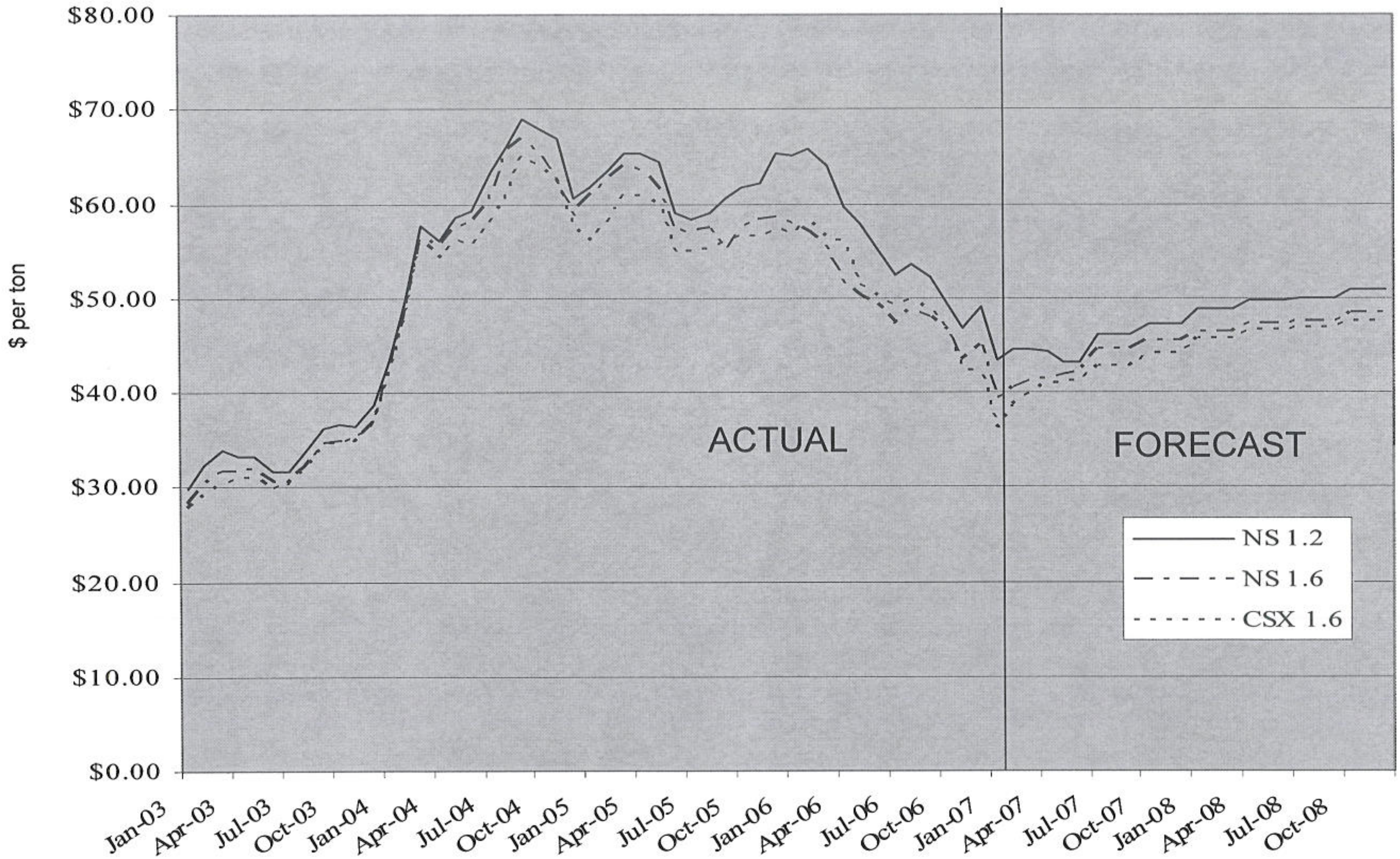
FUEL CONSUMED, PURCHASED AND INVENTORIED FOR THE TWELVE MONTHS ENDED MARCH 31, 2007

COAL			Tons	$/Ton
	Consumed		12,243,334	$71.25
	Coal Purchased		12,675,973	$51.81
	Freight Purchased		12,675,973	$19.53
	Total Purchased		12,675,973	$71.35
	$/mmbtu consumed	$2.90		
OIL			Gallons	$/Gallon
	Consumed		14,578,794	$1.61
	Purchased		17,142,380	$1.84
	$/mmbtu consumed	$11.54		
NATURAL GAS			mmbtu	$/mmbtu
	Consumed		21,276,905	$9.76
	Purchased		21,391,942	$9.75

INVENTORIES AS OF MARCH 31

	2006 Units	2006 $/Unit	2007 Units	2007 $/Unit
Coal (tons)	1,979,256	$71.48	2,406,232	$72.39
Oil (gallons)	29,406,200	$1.28	31,517,619	$1.43
Natural Gas (mmbtu)	48,810	$7.38	163,847	$7.56

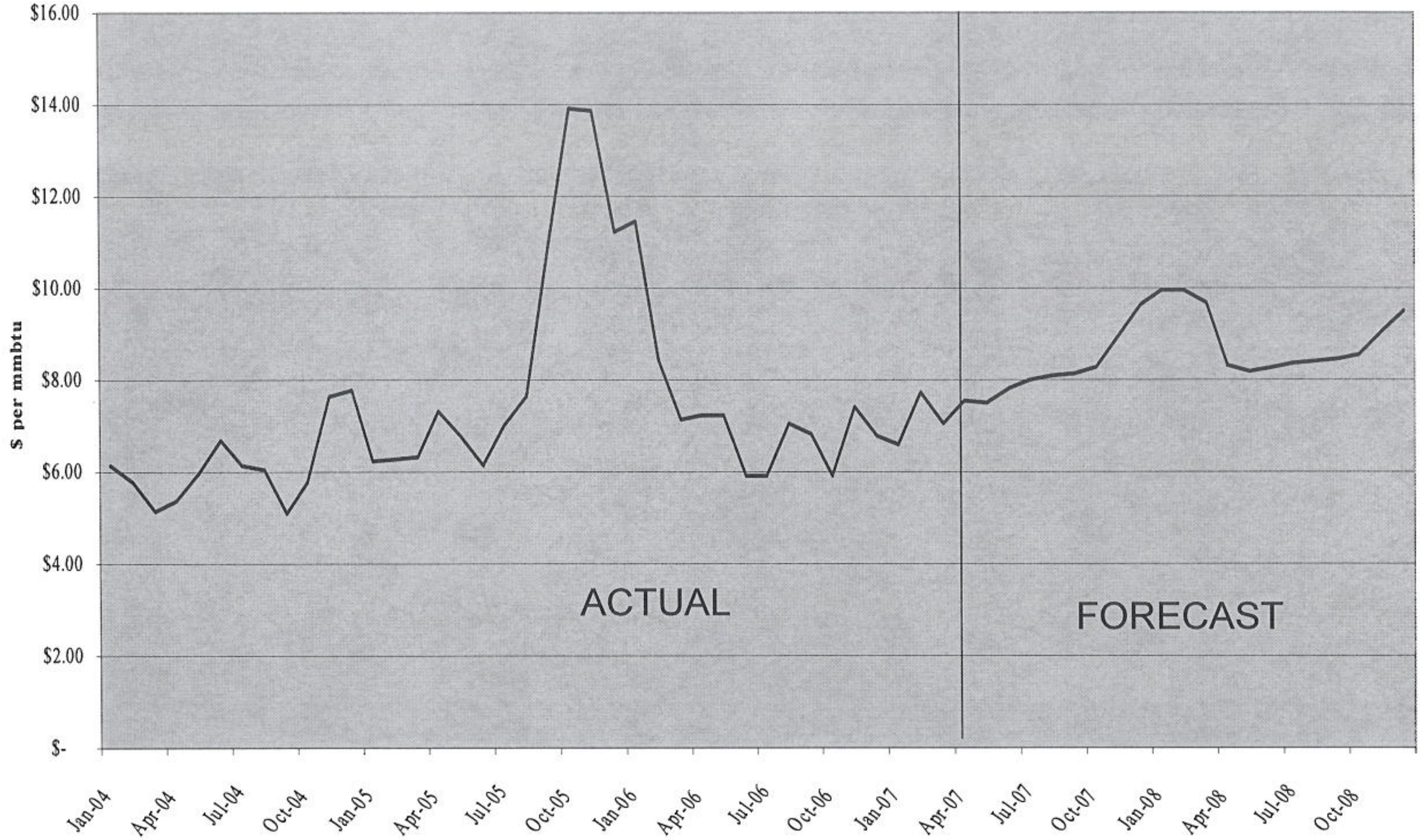
COAL PRICE TRENDS



Barkley Exhibit No. 2
Docket 2007-1-E

Progress Energy

GAS PRICE TRENDS



Actual – NYMEX Last Day Settle Prices

Forecast – NYMEX Settle Prices as of 04/30/2007

Henry Hub Prices

Barkley Exhibit No. 3
Docket No. 2007-1-E

Progress Energy

Barkley Exhibit No. 4
Docket No. 2007-1-E

PROGRESS ENERGY CAROLINAS, INC.

SYSTEM FUEL COST
SOUTH CAROLINA RETAIL FUEL CASE - Docket No. 2007-1-E
TWELVE MONTHS ENDED MARCH 2007

Line		Apr-06	May-06	Jun-06	Jul-06	Aug-06	Sep-06	Oct-06	Nov-06	Dec-06	Jan-07	Feb-07	Mar-07	Twelve Months Ended Mar-07
(1)	Coal	$67,094,315.19	$73,151,106.06	$73,076,871.50	$83,656,129.40	$87,295,539.65	$65,187,425.67	$57,712,256.08	$65,784,470.45	$68,979,654.39	$73,556,929.17	$79,804,181.08	$77,090,398.64	872,389,277.28
(2)	Oil - Steam	600,812.24	570,983.31	628,522.60	611,880.73	418,661.91	680,478.72	670,419.66	1,192,453.01	863,515.27	882,382.93	462,600.79	686,552.49	8,269,263.66
(3)	Oil - Turbine	91,752.83	82,710.01	288,141.72	965,319.13	3,666,953.63	102,995.15	259,057.38	143,864.13	2,844,470.30	2,464,891.74	3,938,564.27	425,998.93	15,274,719.22
(4)	Gas - Steam	7,992.43	757,855.74	1,000,229.88	626,405.16	796,275.85	430,425.62	(33,811.07)	0.00	0.00	0.00	0.00	0.00	3,585,373.61
(5)	Gas - Turbine	7,994,984.36	10,345,505.29	16,800,523.46	36,713,274.36	56,452,286.42	7,705,537.74	8,293,055.47	9,218,753.18	9,432,569.96	14,612,669.03	16,904,219.61	9,668,094.92	204,141,473.80
(6)	**Total Fossil**	75,789,857.05	84,908,160.41	91,794,289.16	122,573,008.78	148,629,717.46	74,106,862.90	66,900,977.52	76,339,540.77	82,120,209.92	91,516,872.87	101,109,565.75	87,871,044.98	1,103,660,107.57
(7)	**Emission Allowance**	1,535,677.75	1,723,118.61	1,622,304.65	(171,438.16)	2,122,997.68	2,099,868.59	852,430.08	1,723,867.69	1,508,981.18	1,673,702.93	1,655,675.97	1,686,493.67	18,033,680.64
(8)	**Nuclear Fuel**	7,206,453.85	7,788,858.88	9,685,776.65	10,097,964.18	8,941,929.92	9,424,813.36	10,025,326.23	8,361,108.25	9,717,673.35	10,180,281.92	7,588,871.67	7,824,918.38	106,843,976.64
(9)	**Purchased Power**	7,453,136.06	11,114,045.08	16,157,682.28	29,014,600.35	37,857,493.89	8,814,682.29	4,056,037.56	11,531,611.15	6,905,239.61	7,616,772.77	9,336,807.42	8,663,017.61	158,521,126.07
(10)	**Off-System Sales**	(11,034,415.80)	(11,605,244.70)	(11,882,526.40)	(25,078,174.30)	(24,038,160.69)	(9,830,272.47)	(8,868,881.85)	(9,228,586.81)	(11,871,820.24)	(12,078,892.59)	(20,747,429.22)	(12,703,693.78)	(168,968,098.85)
(11)	**Total Fuel Costs**	$80,950,708.91	$93,928,938.28	$107,377,526.34	$136,435,960.85	$173,513,978.26	$84,615,954.67	$72,965,889.54	$88,727,541.05	$88,380,283.82	$98,908,737.90	$98,943,491.59	$93,341,780.86	$1,218,090,792.07
(12)	**Total kWh Sales**	3,928,801,508	4,003,507,049	4,476,226,944	4,983,408,635	5,368,636,150	4,817,357,444	4,097,015,791	3,913,913,459	4,283,011,956	4,532,815,080	4,862,750,616	4,199,695,197	53,467,139,829
(13)	**Cost per kWh**	$0.02060	$0.02346	$0.02399	$0.02738	$0.03232	$0.01756	$0.01781	$0.02267	$0.02064	$0.02182	$0.02035	$0.02223	$0.02278

PROGRESS ENERGY CAROLINAS, INC.

Comparison of Actual Fuel Revenues and Expenses
SOUTH CAROLINA RETAIL FUEL CASE - Docket No. 2007-1-E
TWELVE MONTHS ENDED MARCH 2007

Line		Apr-06	May-06	Jun-06	Jul-06	Aug-06	Sep-06	Oct-06	Nov-06	Dec-06	Jan-07	Feb-07	Mar-07	Twelve Months Ended Mar-07
(1)	Actual SC Retail Sales [KWH]	537,475,325	548,090,479	617,165,966	641,219,659	716,971,857	656,120,295	548,644,482	515,789,336	555,022,231	571,895,468	616,014,506	524,177,320	7,048,586,924
(2)	Actual Fuel Cost [$/KWH]	0.02060	0.02346	0.02399	0.02738	0.03232	0.01756	0.01781	0.02267	0.02064	0.02182	0.02035	0.02223	
(3)	Fuel Base [$/KWH]	0.02200	0.02200	0.02200	0.02500	0.02500	0.02500	0.02500	0.02500	0.02500	0.02500	0.02500	0.02500	
(4)	Revenue Required [$]	11,071,992	12,858,203	14,805,812	17,556,594	23,172,530	11,521,472	9,771,358	11,692,944	11,455,659	12,478,759	12,535,895	11,652,462	160,573,680
(5)	Revenue Billed [$]	11,824,457	12,057,991	13,577,651	16,030,491	17,924,296	16,403,007	13,716,112	12,894,733	13,875,556	14,297,387	15,400,363	13,104,433	171,106,477
(6)	Over (Under) Recovery [$]	752,465	(800,212)	(1,228,161)	(1,526,103)	(5,248,234)	4,881,535	3,944,754	1,201,789	2,419,897	1,818,628	2,864,468	1,451,971	10,532,797
(7)	Accounting Adjustments [$]		(6,081)											(6,081)
(8)	Interest [$]				(160,032)	(149,650)	(134,665)	(129,945)	(117,880)	(113,624)	(105,010)	(86,646)	(87,214)	(1,084,666)
(9)	Cumulative Under Recovery [$]	(31,616,054)	(32,422,347)	(33,650,508)	(35,336,643)	(40,734,527)	(35,987,657)	(32,172,849)	(31,088,939)	(28,782,666)	(27,069,048)	(24,291,226)	(22,926,469)	

Barkley Exhibit No. 5
Docket 2007-1-E

Barkley Exhibit No. 6
Docket 2007-1-E

PROGRESS ENERGY CAROLINAS, INC.

SOUTH CAROLINA RETAIL FUEL CASE - DOCKET 2007-1-E
CALCULATION OF BASE FUEL COMPONENT
For the Year Ending June 30, 2008

1. Projected Fuel Expense from July 2007 through June 2008

Cost of Fuel	$1,306,292,879	
System Sales	55,156,984	Mwhs
Average Cost Per KWH	2.368	cents

2. Revenue Difference To be Collected from July 2007 through June 2008

Under-Recovery at June 30, 2007	$21,149,964	
Interest per 2006 settlement	$178,894	
Total	$21,328,858	
Projected S.C. Retail Sales	6,954,910	Mwhs
Average Cost Per KWH	0.307	cents

3. Base Fuel Cost Per KWH - Projected Period

Average Fuel Cost	2.368	cents
Revenue Difference	0.307	cents
Base Fuel Component	2.675	cents

Barkley Exhibit No. 7
Docket No. 2007-1-E

PROGRESS ENERGY CAROLINAS, INC.

Comparison of Actual Fuel Revenues and Expenses

SOUTH CAROLINA RETAIL FUEL CASE - Docket No. 2007-1-E

Line		Apr-07	May-07	Jun-07	Jul-07	Aug-07	Sep-07	Oct-07
(1)	Estimated SC Retail Sales (kWh)	508,134,712	518,620,958	600,481,407	650,872,273	676,924,946	641,158,228	542,017,565
(2)	Estimated Fuel Cost [$/KWH]	0.02146	0.02391	0.02563	0.03105	0.02801	0.02090	0.02575
(3)	Fuel Base [$/KWH]	0.02500	0.02500	0.02500	0.02675	0.02675	0.02675	0.02675
(4)	Revenue Required	$10,904,571	$12,400,227	$15,390,338	$20,209,584	$18,960,668	$13,400,207	$13,956,952
(5)	Revenue Billed	$12,703,368	$12,965,524	$15,012,035	$17,410,833	$18,107,742	$17,150,983	$14,498,970
(6)	Over (Under) Recovery	$1,798,797	$565,297	($378,303)	($2,798,751)	($852,926)	$3,750,776	$542,018
(7)	Interest	($76,765)	($71,475)	($60,891)	($53,356)	($43,206)	($32,062)	($24,087)
(8)	Cumulative Under-Recovery	($21,204,439)	($20,710,617)	($21,149,811)	($24,001,918)	($24,898,050)	($21,179,336)	($20,661,405)

Line		Nov-07	Dec-07	Jan-08	Feb-08	Mar-08	Apr-08	May-08	Jun-08
(1)	Estimated SC Retail Sales (kWh)	489,028,117	562,795,675	639,713,541	577,793,345	535,156,688	511,778,404	522,435,217	605,236,267
(2)	Estimated Fuel Cost [$/KWH]	0.02162	0.02165	0.02208	0.01953	0.02326	0.01961	0.02215	0.02655
(3)	Fuel Base [$/KWH]	0.02675	0.02675	0.02675	0.02675	0.02675	0.02675	0.02675	0.02675
(4)	Revenue Required	$10,572,788	$12,184,526	$14,124,875	$11,284,304	$12,447,745	$10,035,975	$11,571,940	$16,069,023
(5)	Revenue Billed	$13,081,502	$15,054,784	$17,112,337	$15,455,972	$14,315,441	$13,690,072	$13,975,142	$16,190,070
(6)	Over (Under) Recovery	$2,508,714	$2,870,258	$2,987,462	$4,171,668	$1,867,696	$3,654,097	$2,403,202	$121,047
(7)	Interest	($15,683)	($8,166)	($2,333)					
(8)	Cumulative Under-Recovery	($18,168,374)	($15,306,282)	($12,321,153)	($8,149,485)	($6,281,789)	($2,627,692)	($224,490)	($103,443)

PUBLIC SERVICE COMMISSION OF SOUTH CAROLINA
DOCKET NO. 2007-1-E
DIRECT TESTIMONY OF
PROGRESS ENERGY CAROLINAS, INC.

WITNESS DEWEY S. ROBERTS II

Q. Mr. Roberts will you please state your full name, occupation, and address?

A. My name is Dewey S. Roberts II (Sammy). I am employed by Progress Energy Carolinas, Inc. as Manager – Power System Operations in the System Planning and Operations Department. My business address is 3401 Hillsborough St, Raleigh, North Carolina.

Q. Please summarize briefly your educational background and experience.

A. I graduated from North Carolina State University in 1987 with a B.S. Degree in Electrical Engineering. I also obtained a Master of Science Degree in Electrical Engineering from North Carolina State University in 1990 and a Master of Business Administration Degree from North Carolina State University in 2004. I am a member of the Institute of Electrical and Electronics Engineers (IEEE). I am also a registered Professional Engineer in the state of North Carolina and I am recognized as a Certified System Operator by the North American Electric Reliability Council. I joined the Company in 1990 and have held several engineering and management positions in Nuclear Engineering, Engineering and Technical Services, System Operator Training, Portfolio Management, Transmission Services, and Power System Operations. These positions include: Project Engineer, Manager - Transmission Services, and Manager-Power System Operations. In November 2003, I assumed the position of Manager – Power System Operations in the Power

System Operations Section of Progress Energy Carolinas, Inc. System Planning and Operations Department. In my current position as Manager-Power System Operations, I am responsible for managing the safe, reliable, economic, and NERC/FERC and environmentally compliant operations for the Progress Energy Carolinas' eastern and western control area power systems.

Q. What is the purpose of your testimony here today?

A. The purpose of my testimony is to review the operating performance of the Company's nuclear, fossil, combined cycle, combustion turbine, and hydroelectric generating facilities during the period of April 1, 2006 through March 31, 2007 and demonstrate that PEC prudently operated its system for the period under review.

Q. Describe the types of generating facilities owned and operated by the Company.

A. The Company owns and operates a diverse mix of generating facilities consisting of four (4) hydro plants, forty seven (47) combustion turbines, three (3) combined cycle units, nineteen (19) fossil steam generating units, and four (4) nuclear units.

Q. Why does the Company utilize such a diverse mix of generating facilities?

A. Each type of facility has different operating and installation costs and is generally intended to meet a certain type of loading situation. In combination, the diversity of the system, in conjunction with power purchases made when doing so is more cost-effective than using a Company owned generating unit, allows the Company to meet the continuously changing customer load pattern in a reasonable, cost-effective manner. The combustion turbines, which have relatively low installation costs but higher operating costs, are intended to be operated infrequently. They also provide resources that can be started in a relatively short time for emergency situations. In contrast, the large coal and nuclear steam generating plants have relatively high installation costs with lower operating costs, and are intended to operate in a manner to meet the constant level of demand on the system. Based on the load level that the Company is called on to serve at any given point in time, the Company selects the combination of facilities which will produce electricity in the most economical manner, giving due regard to reliability of service and safety. This total cost optimization approach provides for overall minimization of the total cost of providing service.

Q. Please elaborate on the intended use of each type of facility the Company uses to generate electricity.

A. As a general rule, peaking resources such as combustion turbines, are constructed with the intention of running them very infrequently, i.e., only during peak or emergency conditions. Combustion turbines are very effective in providing reserve capacity because they can be started quickly in response to a sharp increase in customer demand, without having to continuously operate the units. Intermediate facilities are intended to operate in a load following manner with periodic startups. They are best utilized to respond to the more predictable system load patterns because the intermediate facilities take some time to come from a cold shut down situation. Additionally, these plants, located across the Company's service territory, contribute to overall system reliability. The Company's intermediate facilities are predominately our older coal-fired plants and gas-fired combined cycle unit. Baseload facilities are intended and designed to operate on a near continuous basis with the exception of outages for required maintenance, modifications, repairs, major overhauls, or for refueling in the case of nuclear plants. The Company's four nuclear units and five Person County coal units constitute the Company's baseload facilities.

Q. How much electricity was generated by each type of Company generating unit in the 12 month period ending March 31, 2007?

A. For the twelve-month period ending March 31, 2007, the Company generated 61,267,524 megawatt hours of electricity. Nuclear plants generated 45.76%, fossil plants generated 49.39%, combined cycle and combustion turbine units generated 3.84%, and hydroelectric units generated 1.01% of the total amount of electricity generated.

Q. Were there any increases in your generating capability during period covered by your testimony?

A. No. The final phase of the planned Nuclear Plant uprate projects was completed with the Brunswick 2 outage in spring 2005. No uprates were recorded for this test period.

Q. How does the Company ensure that it operates these types of generating facilities as economically as possible?

A. The Company has a central Energy Control Center which monitors the electricity demands within our service area. The Energy Control Center regulates and dispatches available generating units in response to customer demand in a least cost manner. Sophisticated computer control systems match the changing load with available sources of power. Personnel at the Energy Control Center, in addition to being in contact with the Company's generating plants, are also in communication with other utilities bordering our service territory. In the event a plant is suddenly forced off-line, the interconnections with neighboring utilities help to ensure that service to our customers will go uninterrupted. Additionally, the interconnections allow us access to the unloaded capacity of neighboring utilities so that our customers will be served by the lowest cost power available through inter-utility purchases.

Q. How does the Company determine when it needs to purchase power?

A. The Company is constantly reviewing the power markets for purchase opportunities. We buy when there is reliable power available that is less expensive than the marginal cost of all available resources to the Company. This review of the power markets is done on an hourly, daily, weekly, monthly basis. Also, with regard to long term resource planning, we always evaluate purchased power opportunities against self build options.

Q. During the review period April 1, 2006 through March 31, 2007, did the Company prudently operate its generating system within the guidelines discussed in regard to the three types of facilities?

A. Yes. Two different measures are utilized to evaluate the performance of generating facilities. They are equivalent availability factor and capacity factor. Equivalent availability factor refers to the percent of a given time a facility was available to operate at full power if needed. Capacity factor measures the generation a facility actually produces against the amount of generation that theoretically could be produced in a given time period, based on its maximum dependable capacity.

Equivalent availability factor describes how well a facility was operated, even in cases where the unit was used in a load following application. Our combustion turbines averaged 94.58% equivalent availability and a 3.77% capacity factor for the twelve-month period ending March 31, 2007. These performance indicators are consistent with the combustion turbine generation intended purpose. The generation was almost always available for use, but operated minimally. Our intermediate gas-fired combined cycle unit averaged 90.18% equivalent availability and a 28.21% capacity factor for the twelve-month period ending March 31, 2007. Again, this level of operation is consistent with the facility's intended purpose, that being a load following position after our intermediate fossil plants. Our intermediate (or cycling) coal fired units, had an average equivalent availability factor of 88.79% and a capacity factor of 59.37% for the twelve-month period ending March 31, 2007. Again, these performance indicators are indicative of good performance and management for intermediate, load following facilities. Our fossil baseload units had an average equivalent availability of 90.04% and a capacity factor of 69.53% for the twelve-month period ending March 31, 2007. Thus, the fossil baseload units were also well managed and operated. For the twelve-month period ending March 31, 2007, the Company's nuclear generation system achieved an actual capacity factor of 91.84%. Excluding outage time associated with reasonable outages, such as refueling, the nuclear generation system's net capacity factor for this period rises to 96.37%. Therefore, pursuant to S.C. Code Ann. § 58-27-865(F), since the adjusted capacity factor exceeds 92.5%, the Company is presumed to have made every reasonable effort to minimize the cost associated with the operation of its nuclear generation.

Q: How did the performance of the Company's nuclear system compare to the industry average?

A: As mentioned in the response to the previous question, during the period April 1, 2006 through March 31, 2007, the Company's nuclear generation system achieved an actual capacity factor of 91.84%. In contrast, the NERC five-year average capacity factor for 2001-2005 for all commercial nuclear generation in North America was 87.69%. The Company's nuclear system incurred a 3.20% forced outage rate during the twelve-month period ending March 31, 2007 compared to the industry average of 4.49%. These performance indicators reflect good nuclear performance and management for the review period.

Q. How did the Company's fossil units perform as compared to the industry?

A. Our entire fossil steam generation fleet operated well during the 12 months ending March 31, 2007, achieving an equivalent availability factor of 89.29% for this period. This performance indicator exceeds the most recently published NERC average equivalent availability for coal plants of 84.85%. The NERC average covers the period 2001-2005 and represents the performance of 899 coal-fired units. Equivalent availability is a more meaningful measure of performance for coal plants than capacity factor because the output of our fossil units varies significantly depending on the level of system load. For the twelve-month period ending March 31, 2007, our baseload fossil units, Mayo Unit 1, and Roxboro Units 1, 2, 3, and 4, operated at equivalent availabilities of 89.98%, 93.92%, 92.03%, 79.54%, and

94.72% respectively. The 79.54% equivalent availability for Roxboro 3 is a result of a major fall 2006 planned turbine and boiler inspection outage.

As I mentioned earlier, the baseload coal units achieved an average equivalent availability of 90.04%. These performance indicators compare well with the industry weighted average equivalent availability factor of 84.51% for 174 similarly sized fossil units.

Q. How did the Company's hydroelectric units perform during the review period?

A. The usage of the hydro facilities on the Company's system is limited by the availability of water that can be released through the turbine generators. The Company's hydro plants have very limited ponding capacity for water storage. The Company operates the hydro plants to obtain the maximum generation from them; but because of the small water storage capacity available, the hydro units have been primarily utilized for peaking and regulating purposes. This operation maximizes the economic benefit of the units. The hydroelectric units had an equivalent availability of 97.14% and operated at a capacity factor of 31.96% for the twelve-month period ending March 31, 2007. The 5 year industry average for hydroelectric generation as published in NERC's most recent report reflects an average equivalent availability of 88.59% and an average capacity factor of 40.17%. These performance indicators show that the Company managed the hydroelectric facilities well, keeping them almost always available for economic use when water was available.

Q. Are you presenting any exhibits with your testimony?

A. Yes. Roberts Exhibit No. 1 is a graphic representation of the Company's generation system operation for the twelve-month period ending March 31, 2007.

Q. Did the Company prudently operate and dispatch its generation resources during the period April 1, 2006 through March 31, 2007 in order to minimize its fuel costs?

A. Yes.

Q. Does this conclude your testimony?

A. Yes.

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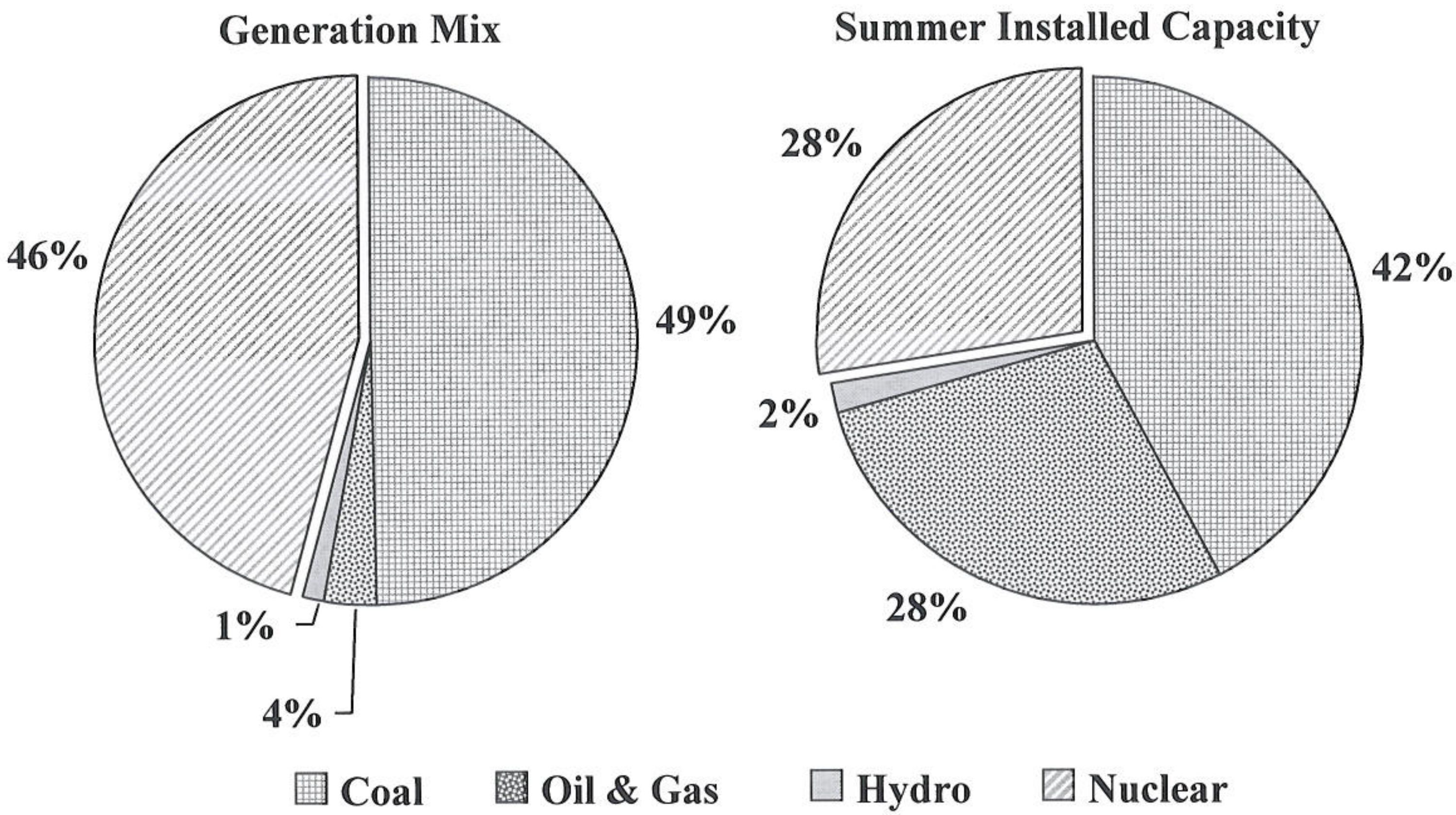
Comparison of Progress Energy Carolinas Installed Generating Capacity to Actual Generation Mix April 1, 2006 through March 31, 2007



Roberts Exhibit No.1
Docket No. 2007-1-E